

$${}^{\times}\mathbb{C}^0 H_{\mathbb{Z}}^{\sharp} = 1$$

$${}^{\times}\mathbb{C}^1 H_{\mathbb{Z}}^{\sharp} = t^2 + 1$$

$${}^{\times}\mathbb{C}^1 \lrcorner_r {}^{\times}\mathbb{C}^0 H_{\mathbb{Z}}^{\sharp} = t^2 + 1 - r$$

$$\mathbb{C}^1 H_{\mathbb{Z}}^{\sharp} = t^2$$

$$\mathbb{C}_x^1 H_{\mathbb{Z}}^{\sharp} = t^2 - 1$$